

Remarks

Applicants have canceled claims 1-10, 13-16, 18, and 21-23 without prejudice or disclaimer. Applicants reserve the right to pursue the subject matter encompassed by all canceled claims in one or more divisional or continuation applications. Claims 24-55 are hereby added. No new matter has been added.

Upon entry of the present amendment, claims 11, 12, 17, 19, 20 and 24-55 will be pending.

Support for New Claims 24-55

Claims 1-10, 13-16, 18, and 21-23 have been canceled without prejudice or disclaimer in favor of new claims in order to claim additional embodiments of the subject matter of the provisionally-elected group (*e.g.*, Gene No. 38, *see* pages 76-79 of the specification). New claims 24-55 find support in the claims as originally filed and throughout the specification. Specifically, support for new claims 24, and 30 can be found, for example, at page 76, line 5 to page 79, line 7; at Table 1, page 94, row 11, as indicated as "Gene No. 38;" and at page 96, line 1 to page 98, line 22. Support for new claims 25 and 31 can be found, for example, at page 113, lines 22-31. Support for new claims 26, and 32 can be found, for example, at page 96, lines 24-29; at page 98, line 24 to page 99, line 25; at Example 5, page 143, line 7 to page 145, line 11; Example 7, page 147, line 1 to page 149, line 17; and Example 8, page 149, line 18 to page 151, line 30. Support for new claims 27, 33, 38, 43, 48, and 53 can be found, for example, at page 110, line 5 to page 111, line 27; and at Example 9, page 151, line 32 to page 153, line 15. Support for new claims 28, 34, 39, 44, 49, and 54 can be found, for example, at page 133, lines 18-27; and at Example 23, page 176, line 28 to page 179, line 25. Support for new claims 29, 35, 40, 45, 50, and 55 can be found, for example, at page 111, line 29 to page 114, line 15; and at Examples 5-8, page 143, line 7 to page 151, line 30. Support for new claims 36, 37, 41, and 42 can be found, for example, at page 99, line 27 to page 107, line 2; and at page 133, line 28 to page 138, line 14. Support for new claims 46, 47, 51, and 52 can be found, for example, at page 107, line 4 to page 108, line 30; and at page 133, line 28 to page 138, line 14.

Accordingly, no new matter has been added by way of amendment, and entry of the above amendment is therefore respectfully solicited.

The Restriction Requirement

Pursuant to Paper No. 6, mailed April 14, 2003, the Examiner has required an election under 35 U.S.C. § 121 of one of Groups I-VII. The Examiner contends that the inventions are distinct each from the other.

In addition, the Examiner contends that each of the Groups as cast by the Examiner reads upon unrelated, patentably distinct sequences and creates an undue search burden. Thus, citing MPEP § 803.04, the Examiner has imposed a further restriction to a single disclosed sequence.

In order to be fully responsive, Applicants provisionally elect, *with traverse*, the invention of Group II, represented by original claims 11, 12, 14-16, and 20, and new claims 24-55, drawn to polypeptides of SEQ ID NO: 97 and clone ID HHEPU32, for further prosecution. Applicants reserve the right to file one or more divisional applications directed to non-elected inventions should the restriction requirement be made final. Applicants point out that claims 1-10, 13-16, 18, and 21-23 have been canceled without prejudice or disclaimer, and that new claims 24-55 are directed to subject matter falling within the ambit of Group II as cast by the Examiner.

With respect to the Examiner's division of the invention into seven groups and the reasons stated therefore, Applicants respectfully disagree and traverse. Even assuming, *arguendo*, that Groups I-VII represented distinct and independent inventions, restriction remains improper unless it can be shown that the search and examination of all groups would entail a "serious burden." See M.P.E.P. § 803. In the present situation, no such showing has been made. Although the Examiner has argued that Groups I-VII are separately classified, Applicants nonetheless submit that a search of the claims of any of the groups would also provide useful information for the claims of the other groups. For example, Applicants submit that a search of polynucleotide claims of the invention would provide useful information for examining claims directed to both polynucleotides and the polypeptides encoded by these polynucleotides. In certain claims this is especially true because the polynucleotide sequence of these claims is defined in part by the polypeptide that the polynucleotide sequence encodes. Further, Applicants point out that, in many if not most publications, where a published nucleotide sequence is an open reading frame, the authors also include, as a matter of routine, the deduced amino acid sequence of the encoded polypeptide.

Similarly, a search of the polypeptide claims of the invention would clearly provide useful information for the examination of claims directed to antibodies either produced in response to or having affinity for the subject polypeptides. This is because antibodies are frequently defined by the antigens that they are produced in response to and the epitopes to which they bind. Moreover, in many publications where an antibody is described, the antigen that it was produced in response to is also described.

Further, searches of publications directed to polynucleotides and the use of those polynucleotides would clearly be overlapping. This is so because in many, if not most, publications which describe polynucleotides, these molecules are described by their function, characterization and/or expression profile. Thus, a search of polynucleotide claims would also provide the Examiner with art directed to the manner in which the claimed polynucleotides could be used in diagnostic and therapeutic indications.

Similarly, searches of publications directed to polypeptides and the use of those polypeptides would clearly be overlapping. This is so because in many, if not most, publications which describe polypeptides, these molecules are described by their function. Thus, a search of polypeptide claims would also provide the Examiner with art directed to the manner in which the claimed polypeptides could be used to treat disease states.

In view of the above, Applicants submit that the searches for polynucleotides, polypeptides, and antibodies; as well as methods of diagnosing, preventing and treating disease states using the nucleic acids and proteins of the subject invention; and methods of identifying a binding partner to a polypeptide of the subject invention; and methods of identifying an activity in a biological assay of the subject invention; and the translational products produced by the methods of identifying an activity in a biological assay wherein said translational products have said activity would clearly be overlapping.

Accordingly, in view of M.P.E.P. § 803, the claims of all of Groups I-VII should be searched and examined together in the present application. Applicants therefore respectfully request that the restriction requirement under 35 U.S.C. § 121 be reconsidered and withdrawn.

Moreover, should the Restriction Requirement be made final, Applicants respectfully request that upon indication of allowable subject matter, the Examiner rejoin the claims of Groups II, IV, and VI.

Applicants retain the right to petition from the restriction requirement under 37 C.F.R. § 1.144.

Conclusion

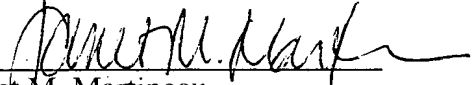
Entry of the above amendment is respectfully solicited. In view of the foregoing remarks, Applicants believe that this application is now in condition for allowance, and an early notice to that effect is urged. The Examiner is invited to call the undersigned at the phone number provided below if any further action by Applicant would expedite the examination of this application.

Finally, if there are any fees due in connection with the filing of this paper, please charge the fees to our Deposit Account No. 08-3425. If a fee is required for an extension of time under 37 C.F.R. § 1.136, such an extension is requested and the appropriate fee should also be charged to our Deposit Account.

Dated: May 9, 2003

Respectfully submitted,

By


Janet M. Martineau

Registration No.: 46,903

HUMAN GENOME SCIENCES, INC.

9410 Key West Avenue

Rockville, Maryland 20850

(301) 315-2723

KKH/JMM/FR/ba